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(54) Dismountable outdoor ping-pong table

(57) The present invention relates to a dismountable outdoor ping-pong table, comprising a surface with regulatory dimensions in a weather-resistant material formed from a one-piece body obtained by molding, with an inner reinforcement core, in the form of an attached box, in an inverted arrangement, on a supporting structure.

Said one-piece body is formed by two parts (19a, 19b), which are superimposed on the mentioned supporting structure, facing and abutting one another by means of one of their edges, said two parts being juxtaposed on a central crosspiece (12) and being fixed to said supporting structure by screwing.

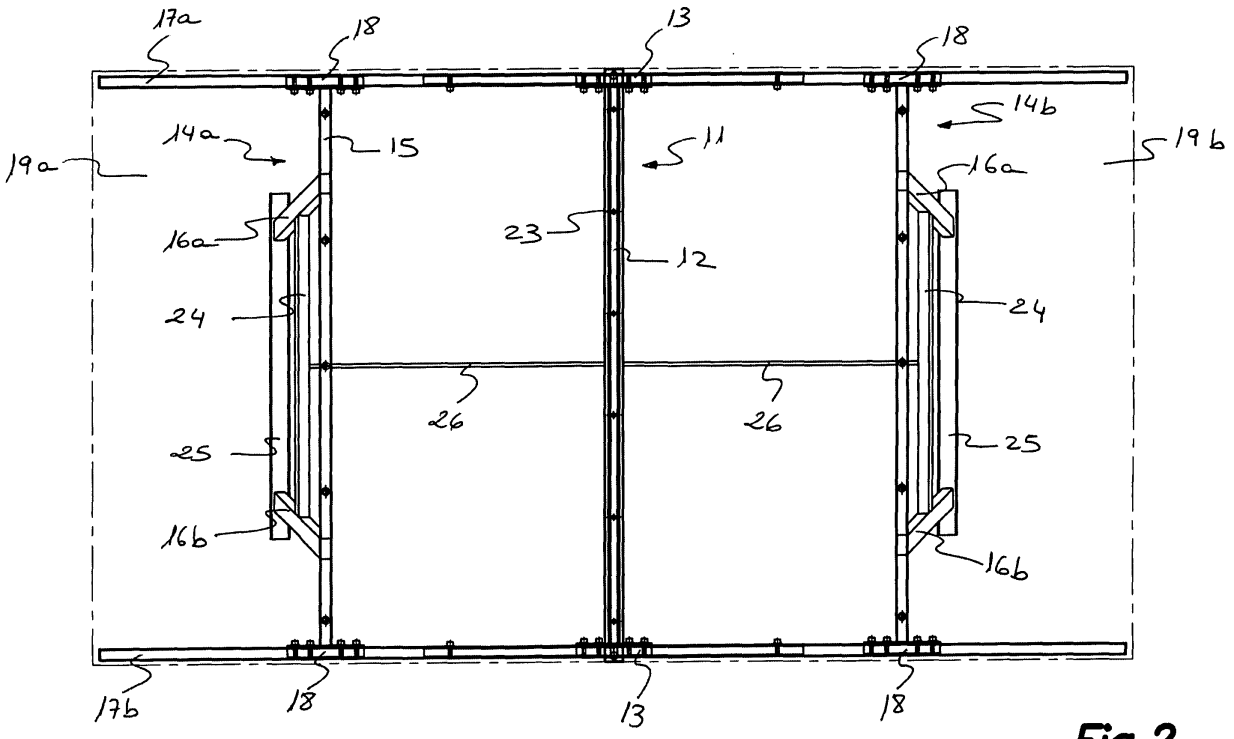

Fig.2

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Description

Field of the Invention

[0001] The present invention generally relates to a table for playing ping-pong or table tennis, and particularly to a dismountable ping-pong table manufactured with a weather-resistant material and with constructive and functional type advantages involving savings and simplification in terms of transport and assembly.

Background of the Invention

[0002] The Spanish utility model ES-1033090U describing equipment for playing table tennis in a fixed installation is known in the state of the art, which describes a table formed by a one-piece body obtained by the injection molding of polyurethane, fiberglass and hardening resins, from which there projects, at its periphery, a wide skirt which can bear advertising inscriptions and with a solid field dividing element. The mentioned one-piece body is connected to X-shaped metal pedestals finished at the upper and lower part by transverse members for their fixation, by means of fixing elements, to the one-piece body and for the attachment to blocks anchored in the ground, said two metal pedestals being connected to one another by a tie.

[0003] The Spanish utility model ES-1034301U is also known, which relates to a ping-pong table of the type mentioned with a perimetric skirt intended to bear advertising inscriptions or graphics. The mentioned skirt has a series of recesses, in which there are housed transparent methacrylate sheets bearing the mentioned inscriptions or graphics, defined in their rear face, directly opposite the bottom of the recess of the corresponding panel.

[0004] Both ping-pong tables described in the mentioned utility models are robust and have been manufactured with weather-resistant materials. However, said tables have the drawback of being made with parts with large dimensions and weight, which makes it difficult to handle and transport them.

[0005] The present utility model solves the mentioned problem, offering a dismountable ping-pong table, the transport of which is simpler and more cost-effective as it is broken down into pieces or subunits with a smaller size, two of which are auxiliary for the transport of the assembly which is facilitated and preserving the robustness and resistance necessary for being installed outdoors. The mentioned ping-pong table furthermore has a specific structure adapted to resist the inclemency of the weather and acts of vandalism.

Brief Description of the Invention

[0006] The present invention relates to a dismountable outdoor ping-pong table, with a surface with regulatory dimensions, manufactured in a weather-resistant material formed by two parts which are superimposed on the mentioned supporting structure, facing and abutting one another, by means of one of their edges, said two parts being juxtaposed on a central crosspiece of said supporting structure to which they are fixed by screwing.

[0007] Each of the mentioned parts forming the table comprise a one-piece body made up, according to a preferred embodiment, of an intermediate sheet made of wood (for example, wood cut into pieces, compressed and agglomerated) coated on its two larger sides with a mat of fiberglass and hardening resins, and with a final injected polyurethane envelopment.

[0008] Each one-piece body further comprises, preferably, an inner reinforcement core formed by a metal frame.

[0009] The mentioned one-piece body provides a board with a skirt, downwardly oriented (in an assembly arrangement) in three of its edges. These boards are superimposed on a supporting structure, with the respective edge lacking the skirt facing and abutting them, the juxtaposition area being arranged above a central crosspiece of the supporting structure. The skirts of each of the boards are thus arranged facing downwards in the form of an inverted box and each board is fixed to the supporting structure, in several areas thereof, by screwing. These skirts considerably extend the sides of the ping-pong table, giving panels which can bear promotional or advertising inscriptions.

[0010] The mentioned supporting structure is dismountable and is formed by:

- an H-shaped main element formed by the mentioned central crosspiece and finished at its two ends by transverse support elements with an L-shaped section open to the outside;
- two supports arranged on both sides of the central crosspiece, each of the two supports comprising at least one beam parallel to the central crosspiece, finished at its two ends by transverse support elements with an L-shaped section, two legs emerging from the lower part of said beam; and
- two stringers fixed to the respective ends of the support elements and to the L-shaped support parts by screwing, the horizontal outer face of the support elements and of the L-shaped support parts being aligned in one and the same plane, on which each of the mentioned boards is supported.

[0011] The ping-pong table object of the present invention further comprises a rigid net, the support base of which is fixed by screwing to the central crosspiece by means of fixing elements passing through holes defined in the mentioned central crosspiece, the net being superimposed over both boards in the edge of the facing abutment area, concealing the juxtaposition joint of the edges and the side joint such that there is no accessible joint, thus making a possible act of vandalism difficult.

[0012] All the connections of the two parts of the table

to the supporting structure are made by screwing and are concealed and protected by the mentioned skirts, and are thus difficult to access.

[0013] Furthermore, in order for the boards to be arranged connected to one another, they comprise in the edge of the facing abutment area cutouts allowing the passage of the mentioned fixing elements for fixing the support base of the net to the central crosspiece.

[0014] Moreover, each of the boards is secured to the structure by screwing, nuts or female parts for receiving fixing elements for fixing to the supporting structure, provided for such purpose, being embedded to that end in the body of each board.

[0015] In addition, each of the supports comprises a respective transverse reinforcement beam linking the corresponding two legs by a central area thereof, and a respective base part fixed to a lower end of each of the two legs. Each of the transverse reinforcement beams is connected to the central crosspiece by means of a respective tie.

[0016] For a preferred embodiment of the present invention, each of the stringers is formed by a first inner tube and a second outer tube which are telescopically coupled, the first inner tube comprising a series of threaded sockets and the second outer tube a series of holes corresponding with one another, in a certain insertion position, aligned, allowing the introduction of the first tube inside the second tube and the arrangement of fixing elements therethrough.

[0017] The mentioned telescopic arrangement allows obtaining a stringer by means of shorter parts, facilitating the transport thereof since they can be introduced inside boxes formed by each of the boards, which can be used as receptacles for the transport of the elements forming said supporting structure, dismounted.

Brief Description of the Drawings

[0018] The previous and other advantages and features will be more fully understood from the following detailed description of several embodiments with reference to the attached drawings, which must be considered in an illustrative and non-limiting manner, in which:

- Figure 1 shows a side elevational view of the ping-pong table object of the present invention, sectioned;
- Figure 2 is a plan view of the ping-pong table in which the boards have been depicted with a dotted line to show the elements comprised under them and forming a supporting structure;
- Figure 3a shows a front elevational view of the ping-pong table;
- Figure 3b shows a larger-sized detail of a sector of the table of Figure 3a, including part of the net;
- Figure 4a is an elevational view of the central crosspiece of the supporting structure of the ping-pong table;
- Figure 4b shows a plan view of said central crosspiece of the supporting structure;
- Figure 5a is an elevational view of one of the supports of the ping-pong table;
- Figure 5b is a plan view of the support shown in Figure 5a;
- Figure 6a shows a cross-section of one of the boards forming the table, showing the auxiliary elements for fixing the board to the structure, embedded in the body of the table;
- Figure 6b shows a detail of the board illustrated in Figure 6a; and
- Figure 7 shows a perspective view of the two boards forming the ping-pong table of the present invention, which adopt the form of boxes for the transport of the parts forming the supporting structure.

Detailed Description of an Embodiment

[0019] The mentioned figures show a dismountable outdoor ping-pong table, manufactured in a weather-resistant material, formed by two parts which are superimposed on the mentioned supporting structure, facing and abutting one another, by means of one of their edges, said two parts being juxtaposed on a central crosspiece of a supporting structure to which they are fixed by screwing.

[0020] Each of the mentioned parts forming the table comprises a one-piece body made up, according to a preferred embodiment, of an intermediate sheet made of wood (for example, particleboard) coated on its two larger sides with a mat of fiberglass and hardening resins, and with a final injected polyurethane envelopment.

[0021] According to the invention, each of the parts comprises a rectangular board 19a, 19b, which boards are superimposed on a supporting structure with one of their edges facing and abutting one another, being superimposed on a central crosspiece 12 and being fixed to the structure by screwing.

[0022] Figure 7 likewise shows the two boards 19a, 19b, each of which comprises, for a preferred embodiment of the present invention, a skirt 20, downwardly oriented (in an assembly arrangement) prolonging three of its edges, providing a configuration like an inverted box, lacking one of its sides, the boards 19a, 19b being arranged on the mentioned supporting structure facing and abutting one another by the edge lacking the skirt 20, the skirts 20 of each of the boards 19a, 19b facing downwards. The function of the mentioned skirts is to provide a better envelopment of the inner structure, preserving its integrity (all the screwed connections are concealed and inside) and externally offers a support for inscriptions or for fixing various advertising or informative motifs. Before their assembly, these boards, according to that shown in Figure 7 form a half-box, which has been designed to be used to arrange therein the different elements forming the ping-pong table and thus facilitate the transport thereof. Given the dimensions each half-box will house part of the elements of the framework of the

table.

[0023] Figures 1, 2 and 3a show the supporting structure of the ping-pong table, which is dismountable and is formed by:

- an H-shaped main element 11 which, according to that shown in Figures 4a and 4b, is formed by the central crosspiece 12, which is finished at its two ends by support angles or transverse elements 13 with an L-shaped section open to the outside;
- two supports 14a, 14b, arranged on both sides of the central crosspiece, each of which is formed by at least one beam 15 parallel to the central crosspiece 12, finished at its two ends by support angles or transverse elements 18 with an L-shaped section, open to the outside, two legs 16a, 16b emerging from the lower part of the mentioned beam 15; and
- two stringers 17a, 17b which are supported and fixed to the respective ends of the support elements 13 and to the L-shaped support parts 18 by screwing, the horizontal outer face of the support elements 13 and of the L-shaped support parts 18 being aligned in one and the same plane. Figure 2 shows how each of the boards 19a, 19b is supported on a portion of each of the stringers 17a, 17b.

[0024] Figure 3a shows a front elevational view of the ping-pong table, showing a rigid net 21, the support base 22 of which is attached by screwing to the central crosspiece 12 by means of fixing elements passing through holes 23 defined in the central crosspiece 12, which are shown with greater detail in Figures 2 and 3b. Moreover, the mentioned net 21 is superimposed over both boards 19a, 19b in the facing abutment area, concealing the juxtaposition joint of the edges and the side joint (for which purpose it has an extension which is superimposed on said side joint). In a preferred embodiment of the present invention, and as shown in Figure 7, each of the boards 19a, 19b has, in the edge of the facing abutment area, a series of semi-openings or cutouts coinciding with those of the opposite board, forming upon the contact of both edges a series of openings for the passage of the screws allowing the mentioned fixing of the net 21 to the central crosspiece 12.

[0025] Furthermore, and as shown in Figures 6a and 6b, each board 19a, 19b has threaded nuts embedded therein, which nuts are prepared to receive fixing elements for securing the two boards 19a, 19b to the structure by screwing.

[0026] In relation to the mentioned supports 14a, 14b, Figures 5a, and 5b show an elevational and plan view respectively, in which it is seen that each of the supports 14a, 14b comprises a respective transverse reinforcement beam 24 linking said two legs 16a, 16b by a central area thereof, and a respective base part 25 fixed to a lower end of each of the two legs 16a, 16b.

[0027] In the embodiment shown in Figures 1, 2 and 3a, it is shown that each of the transverse reinforcement beams 24 is connected to the central crosspiece 12 by a respective tie 26.

[0028] In addition, each of the stringers 17a, 17b is formed, according to a preferred embodiment, by a first inner tube and a second outer tube which are telescopically coupled. The first inner tube comprises a series of sockets and the second outer tube comprises a series of holes corresponding with one another in a certain insertion position. The fact that the stringers are telescopic facilitates the transport thereof, since when the inner tube is inserted into its corresponding outer tube each of the elements adopts a size suitable for being stored inside one of the half-boxes, for the purpose of the transport of the assembly.

[0029] A person skilled in the art may introduce changes and modifications in the embodiments described without departing from the scope of the invention as it is defined in the attached claims.

Claims

1. A dismountable outdoor ping-pong table, of the type comprising a surface with regulatory dimensions in a weather-resistant material formed from a one-piece body obtained by molding, with an inner reinforcement core, in the form of an attached box, in an inverted arrangement, on a supporting structure, **characterized in that said** one-piece body is formed by two parts, which are superimposed on the mentioned supporting structure, facing and abutting one another by means of one of their edges, said two parts being juxtaposed on a central crosspiece (12) and being fixed to said supporting structure by screwing.

2. The ping-pong table according to claim 1, **characterized in that** said supporting structure is dismountable and is formed by:

   - an H-shaped main element (11) formed by said central crosspiece (12) which is finished at its two ends by transverse support elements (13) with an L-shaped section open to the outside;
   - two supports (14a, 14b) arranged on both sides of said central crosspiece, each of said two supports comprising at least one beam (15) parallel to the central crosspiece (12), finished at its two ends by transverse support elements (18) with an L-shaped section, open to the outside, two legs (16a, 16b) emerging from the lower part of said beam (15); and
   - two stringers (17a, 17b) which are supported and fixed to said support elements (13) and to said L-shaped support parts (18) by screwing, the horizontal outer face of said support elements (13) and of said L-shaped support parts (18) being aligned in one and the same plane.

3. The ping-pong table according to claim 1, **characterized in that** each of said parts comprises a rectangular board (19a, 19b) provided in three of its edges with a skirt (20), downwardly oriented in an assembly arrangement, in the form of an inverted box, said boards being arranged on the mentioned supporting structure facing and abutting one another by the edge lacking the skirt (20).

4. The ping-pong table according to claim 3, **characterized in that** each of the boards (19a, 19b) is laterally supported on a portion of each of the stringers (17a, 17b).

5. The ping-pong table according to claim 3, **characterized in that** it comprises a rigid net (21), the support base (22) of which is fixed by screwing to the central crosspiece (12) by means of fixing elements passing through holes (23) defined in said central crosspiece (12), said net (21) being superimposed over both boards (19a, 19b) in the facing abutment area of their edges, concealing the juxtaposition joint and the side joint.

6. The ping-pong table according to claim 5, **characterized in that** said boards (19a, 19b) comprise in the edge of the facing abutment area cutouts for the passage of said fixing elements.

7. The ping-pong table according to claim 1, **characterized in that** fixing elements for said fixation by screwing are embedded in the body of each board (19a, 19b).

8. The ping-pong table according to claim 2, **characterized in that** each of said supports (14a, 14b) comprises a respective transverse reinforcement beam (24) linking said two legs (16a, 16b) by a central area thereof, and a respective base part (25) fixed to a lower end of each of the two legs (16a, 16b).

9. The ping-pong table according to claim 8, **characterized in that** each of said transverse reinforcement beams (24) is connected to said central crosspiece (12) by a respective tie (26).

10. The ping-pong table according to claim 2, **characterized in that** each of said stringers (17a, 17b) is formed by a first inner tube and a second outer tube which are telescopically coupled, said first inner tube comprising a series of sockets and said second outer tube comprising a series of holes corresponding with one another in a certain insertion position.

11. The ping-pong table according to claim 1, **characterized in that** each of the parts of the table comprises a one-piece body formed by a central sheet made of particleboard coated on its two larger sides with a mat of fiberglass and hardening resins, and with a final injected polyurethane envelopment.

12. The ping-pong table according to claim 11, **characterized in that** it further comprises an inner reinforcement core formed by a metal frame.

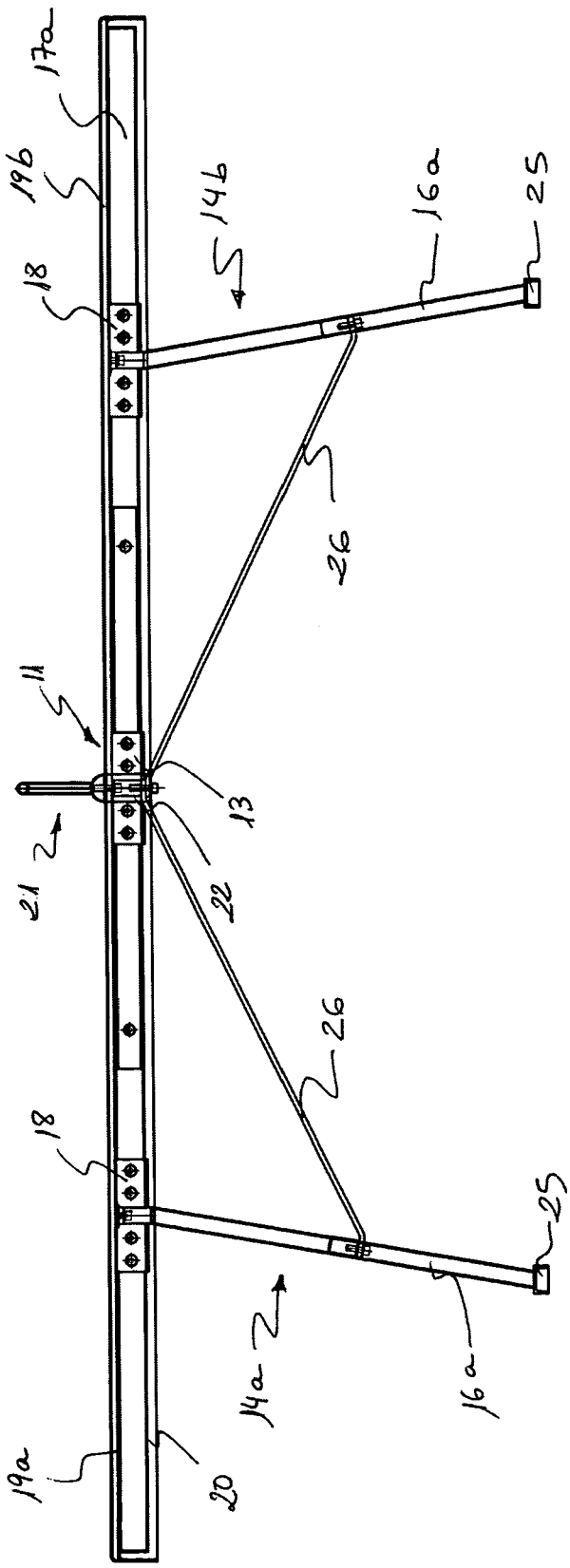
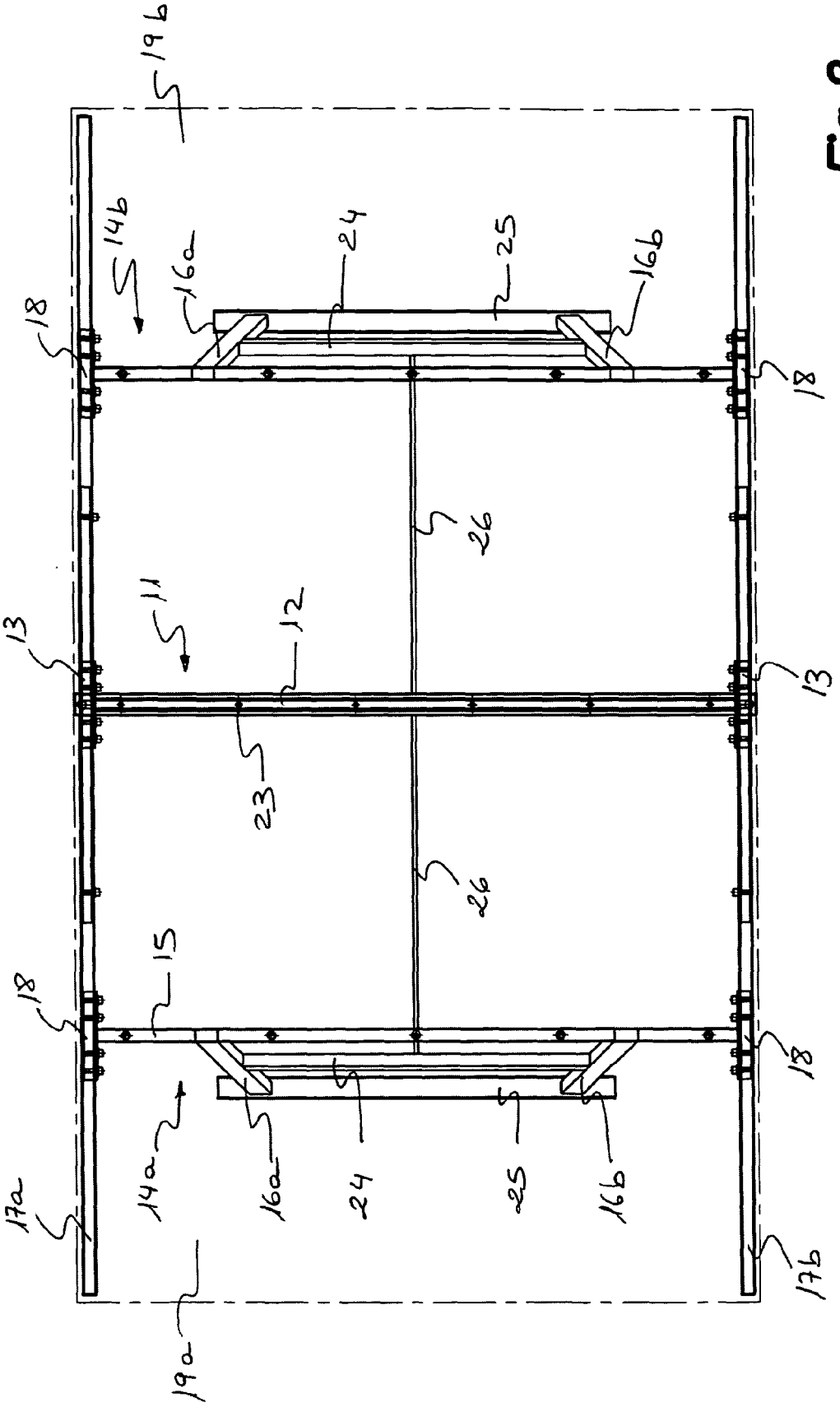


Fig. 1


19b
14b
18
16a
24
25
16b
18
26
11
12
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14a
16a
24
25
16b
17a
17b
19a

Fig.2

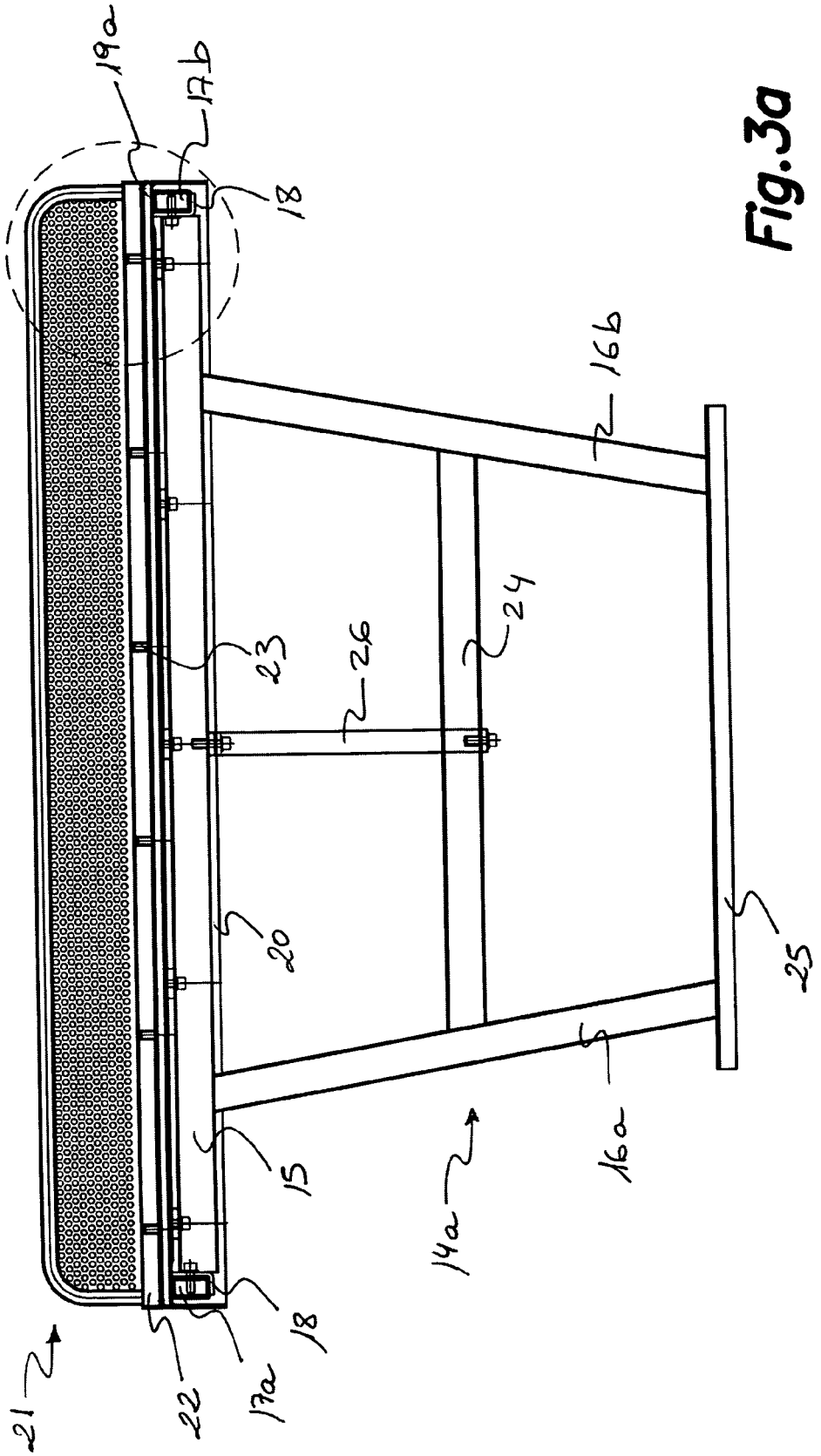

Fig.3a

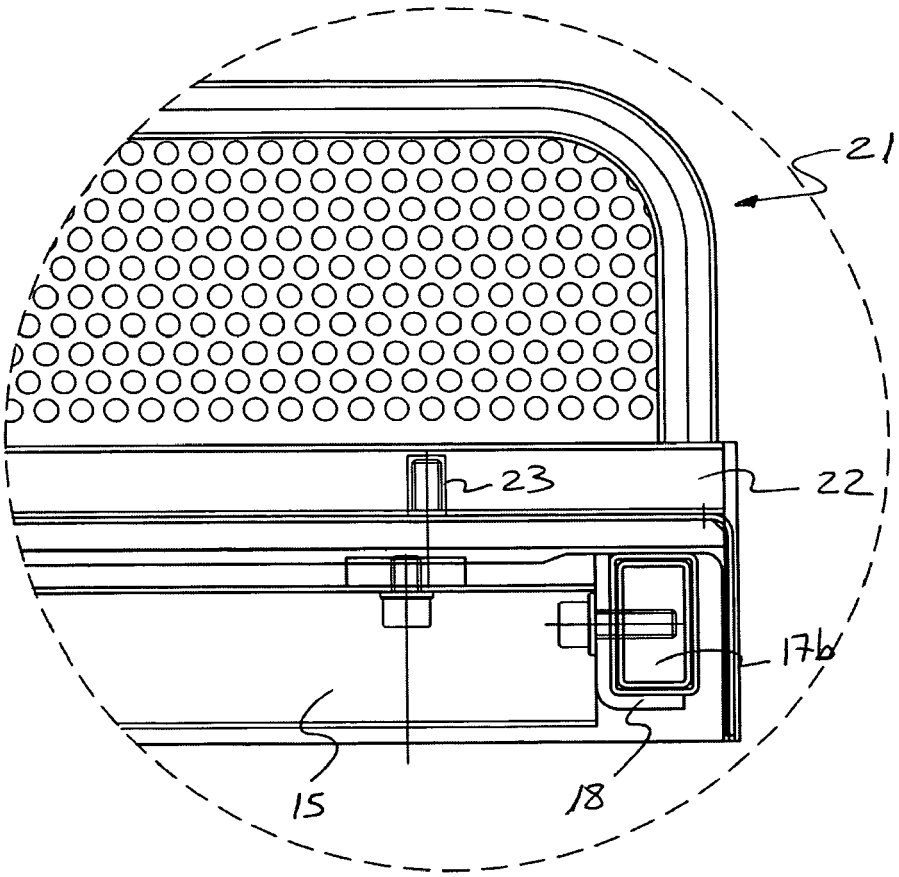

Fig.3b

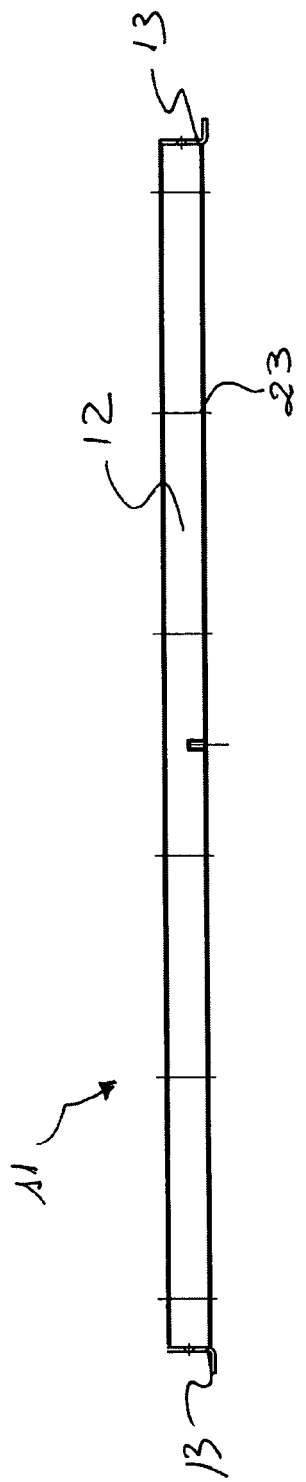

Fig. 4a

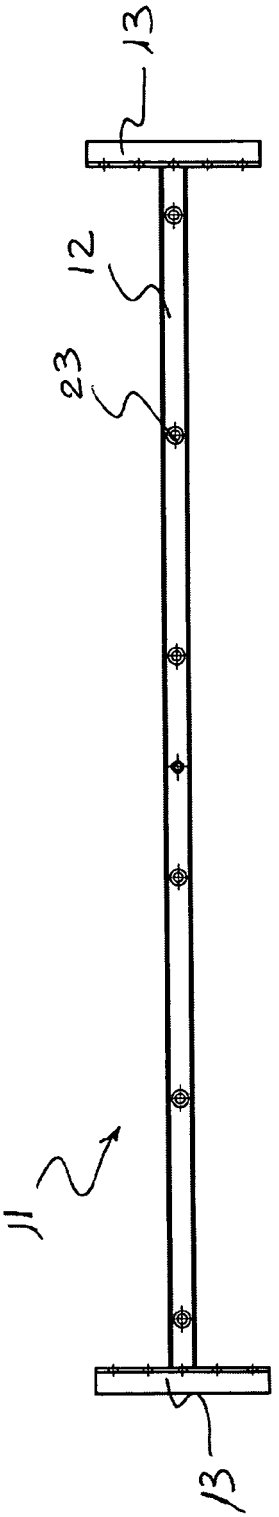

Fig. 4b

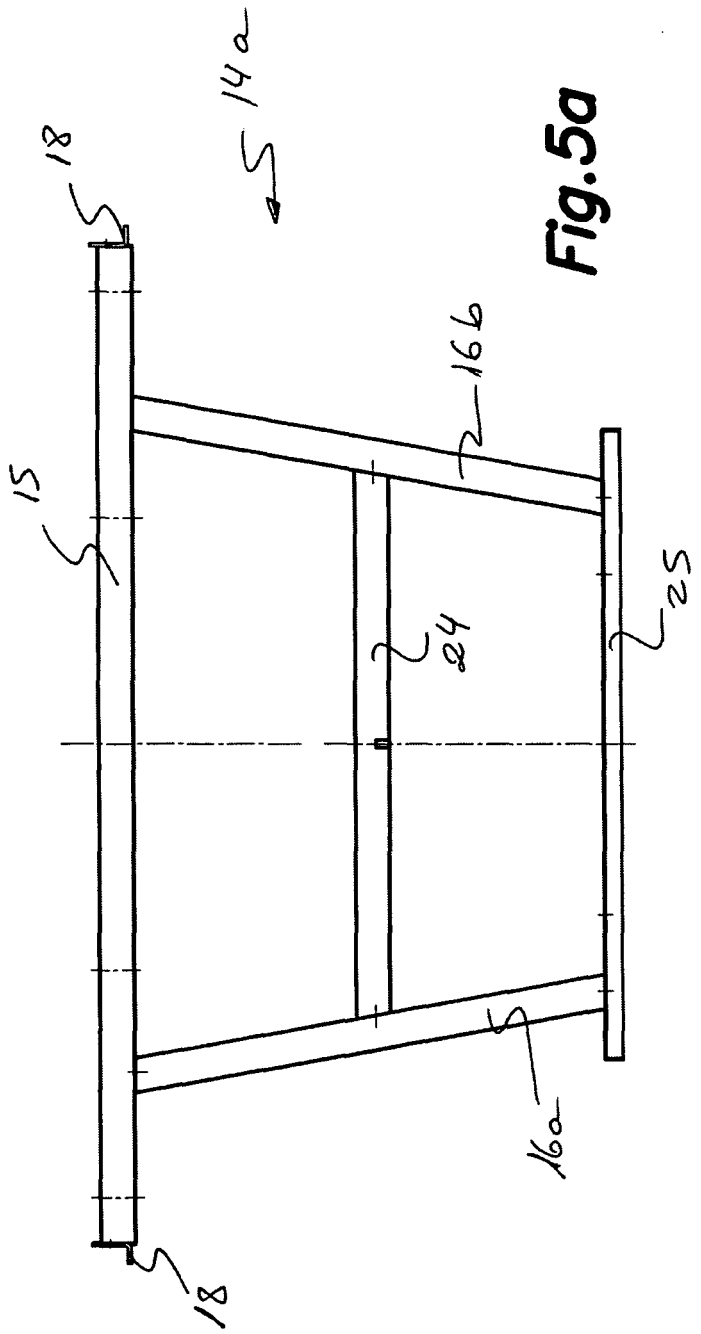

Fig.5a

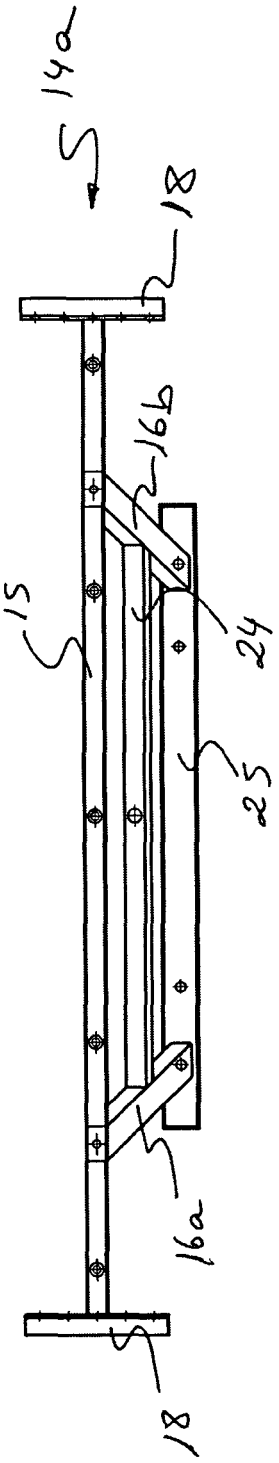

Fig.5b

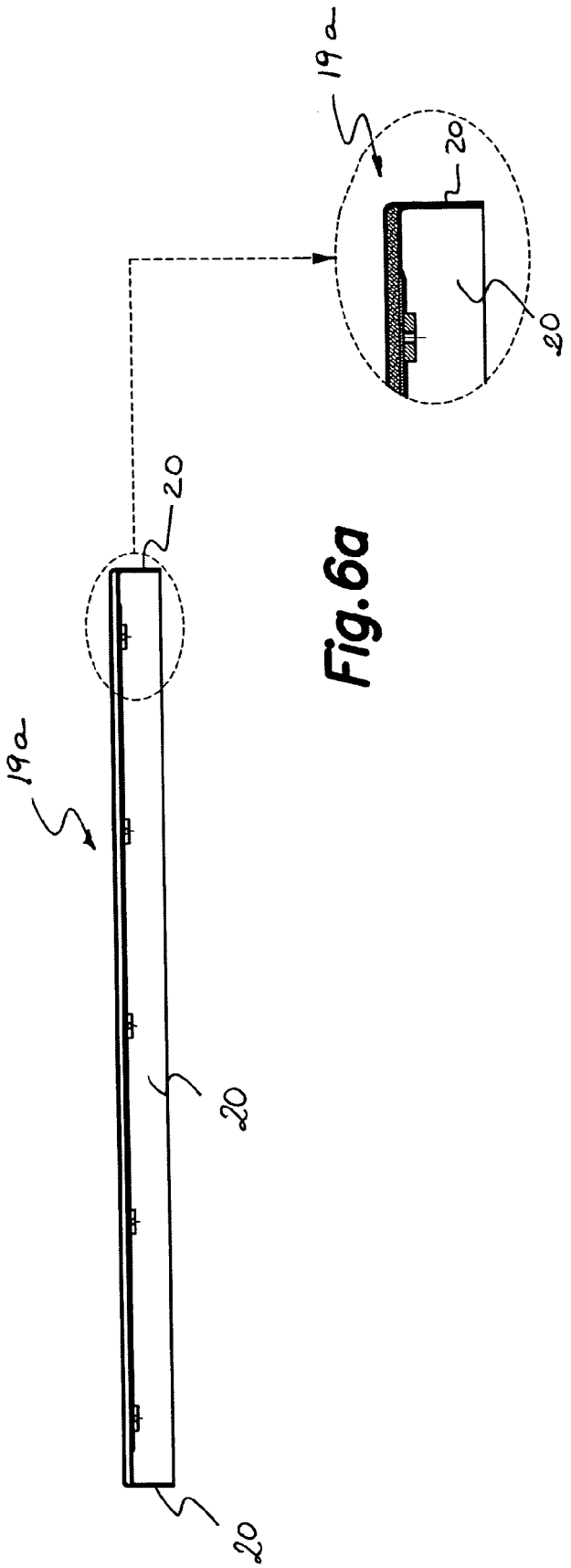

Fig.6a

Fig.6b

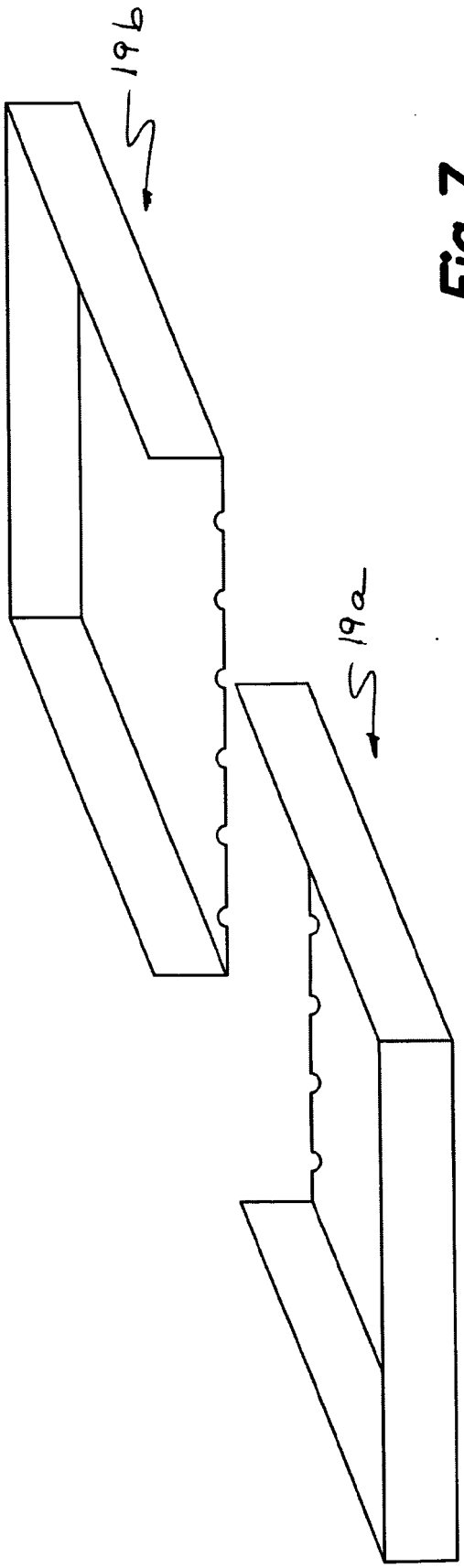

Fig.7

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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	JOOLA TISCHTENNIS GMBH & CO. KG: "Wetterfester Tisch CITY" INTERNET CITATION, [Online] 5 April 2001 (2001-04-05), XP002553859 Retrieved from the Internet: URL:http://www.joola.de//de/produkte/tische/city.htm> [retrieved on 2009-11-04] * the whole document *	1-12	INV. A47B25/00 A63B67/04
A	CN 2 827 462 Y (ZHAO HONGQIANG [CN]) 18 October 2006 (2006-10-18) * abstract; figures 1-8 *	1-12	
A	DE 28 53 751 A1 (CHRISTOPEIT HORST) 19 June 1980 (1980-06-19) * figure 3 *	1-12	
A	FR 2 809 965 A3 (E R ROVERA S P A [IT]) 14 December 2001 (2001-12-14) * figures 1-3 *	1-12	
			TECHNICAL FIELDS SEARCHED (IPC) A63B A47B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	4 November 2009	Vehrer, Zsolt

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- ES 1034301 U **[0003]**